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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,739	12/21/2000	Bo Hakansson	1274	5587

7590 07/01/2003

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EXAMINER

CHANEY, CAROL DIANE

ART UNIT

PAPER NUMBER

1745

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,739

Applicant(s)

HAKANSSON ET AL.

Examiner

Carol Chaney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-37 and 39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-37 and 39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

Summary

Claims 30-37 and 39 are pending in the application. Claims 20-29 and 38 were cancelled in applicants' amendment of 14 April 2003, and claim 39 was added.

Applicant's arguments filed 14 April 2003 have been fully considered but they are not fully persuasive.

The rejection over SKU 9966 is withdrawn in the interest of furthering prosecution of this case.

The rejection under 35 U.S.C. 102(b) as being anticipated by Pimlott et al. is maintained for reasons discussed below.

Claim Rejections - 35 USC § 102

Claims 30-37 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Pimlott et al., US Patent 4,668,371, which includes US Patent 4,444,632 incorporated by reference, for essentially reason of record.

Pimlott et al. disclose a construction for an electrochemical cell. The construction includes a first metallic layer (36), an anode which is preferably a metal, such as tantalum, tungsten, columbium, zirconium, molybdenum, or titanium, with Ti being most preferred. (Column 6, lines 39-46.) A second layer cathode (38), which is made of a metal such as iron, nickel, lead, molybdenum, or cobalt. (Column 6, lines 54-66.) Reference numeral 13 is a layer described as a "mattress" and is a mesh for venting gases. (Column 7, lines 13-20 and US Patent 4,444,632 column 4, lines 19-27

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and 66-68.) The third layer disclosed by Pimlott et al. is the catholyte cover (22) which is preferably made from iron, steel, stainless steel, nickel, lead, molybdenum or cobalt. (Column 5, line 56-column 6, line 2.) With regards to claim 36, the third layer (reference 22) is relatively non-porous and will have a lower hydrogen permeability than the second layer (reference 38) which is intended to be permeable to hydrogen. (Column 7, lines 24-32.) A fourth layer is the anolyte cover, reference numeral 24.

U.S. Patent

May 26, 1987

4,668,371

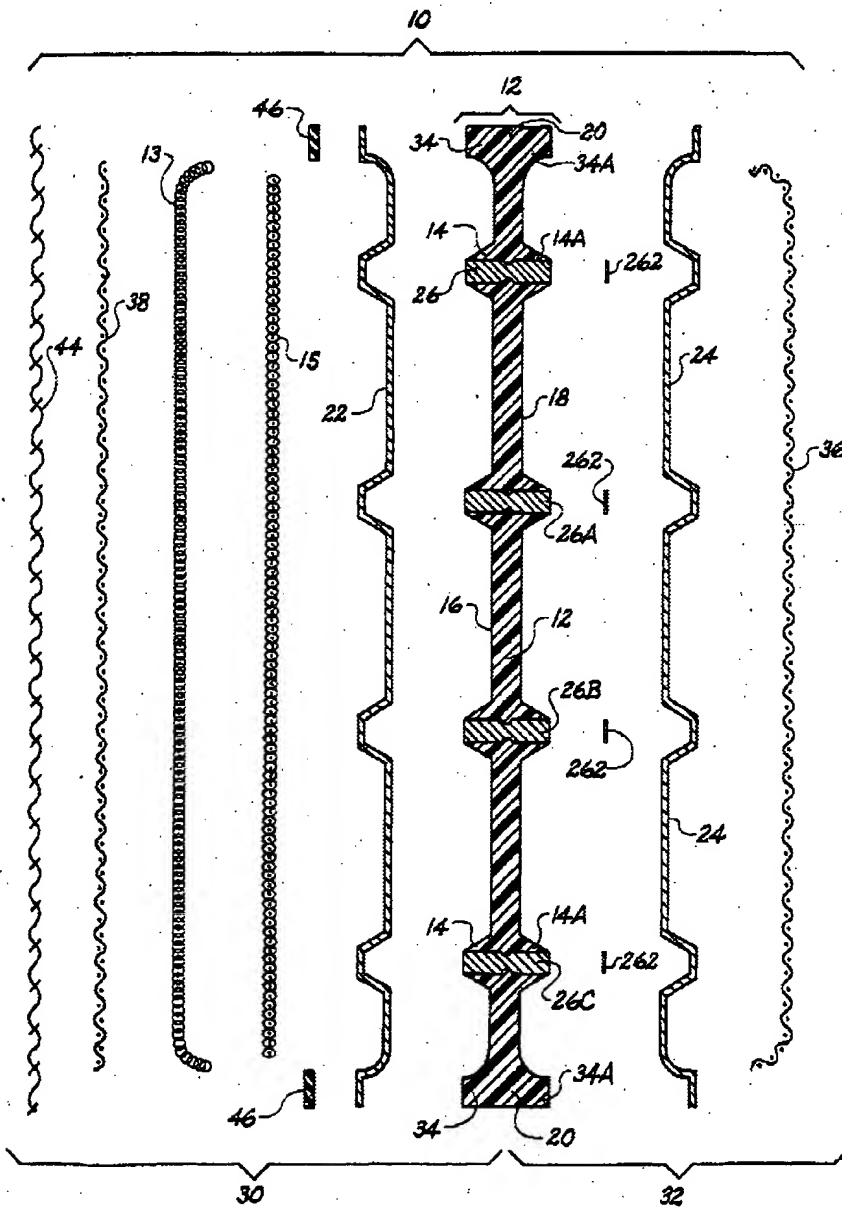


FIG. 1

With regards to claim 33, a preferred embodiment of mattress 13 includes intermeshed wound metallic spirals forming channels. The spirals have diameters 5 to

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10 times the diameter of the wires used. (See US Patent 4,444,632 column 4, lines 53-62.) Preferred diameters for the wires are between 0.05 and 0.5 millimeters. (US Patent 4,444,632 column 12, lines 38-40.) Therefore, diameters of the channels in the mattress used in the Pimlott et al. invention are in the range of about 0.25 mm and 5 mm or 250 microns to 5,000 microns.

Response to Arguments

Applicant asserts that the anode disclosed by Pimlott is not described to be sensitive to hydrogen embrittlement. This does not mean the anode described by Pimlott is not sensitive to hydrogen embrittlement. Pimlott describes the anode as preferably made of titanium which is inherently sensitive to hydrogen embrittlement as noted by applicants on page 4 line 25 of their specification.

Applicant asserts Pimlott does not disclose a mesh joined between a first and second metallic layer. However, Pimlott discloses in Fig. 1 a layer (13) disposed between layers (36) and (38). Both (36) and (38) are metallic. Reference number 13 is described by Pimlott as a "mattress". This structure, which is used by Pimlott to establish electrical contact between the cathode (38) and current collector (15) is taught as having the same type of structure as compressible, pliable and spring like electrode element described by deNora. (See deNora, Fig. 4 and column 11, lines 9-22.) The element shown by Pimlott as (13) is described by deNora as including mesh.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol Chaney whose telephone number is (703) 305-3777. The examiner can normally be reached on Mon - Fri 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 703-308-2383. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Carol Chaney
Primary Examiner
Art Unit 1745

cc
June 29, 2003